

WHAT IS CLAIMED IS:

1. A crosstalk checking method comprising the steps of:  
extracting a parallel line length between adjacent  
lines by inputting a layout, and further, inputting a  
5 reference value per pitch describing restriction values of  
parallel line lengths different according to a line pitch;  
and

calculating the line pitch with respect to the  
adjacent lines extracted in the parallel line length  
10 extracting step, comparing the parallel line length between  
the adjacent lines with the reference value per pitch, and  
thus, determining a portion at which crosstalk occurs in  
the case where the parallel line length is greater.

2. A crosstalk checking method comprising the steps of:

15 extracting a parallel line length between adjacent  
lines by inputting a layout, and further, inputting a  
reference value per drive capability describing restriction  
values of parallel line lengths different according to  
drive capability of a cell for driving a line; and

20 extracting the reference value per drive capability  
corresponding to the drive capability of the cell for  
driving the line with respect to the adjacent lines  
extracted in the parallel line length extracting step,  
comparing the parallel line length between the adjacent  
25 lines with the reference value, and thus, determining a  
portion at which crosstalk occurs in the case where the  
parallel line length is greater.

3. A crosstalk checking method comprising the steps of:

30 extracting a parallel line length between adjacent  
lines by inputting a layout, and further, inputting a  
reference value describing a restriction value of the  
parallel line length;

tracing a path by using a net list and a point of a

clock source as inputs, so as to extract a clock net; and

classifying the adjacent lines into a line of a victim which suffers an influence of the crosstalk and a line of an aggressor which gives the influence of the crosstalk based on the magnitude of an inclination of a signal waveform at a cell output terminal with respect to the extracted net by using inclination information describing the inclination of the signal waveform at the cell output terminal described in the net list, as inputs, so as to determine whether or not the net is to suffer the influence of the crosstalk.

4. A crosstalk checking method comprising the steps of:

extracting a parallel line length between adjacent lines by inputting a layout, and further, inputting a reference value describing a restriction value of the parallel line length;

inputting the parallel line length, and further, inputting a delay fluctuation table describing delay fluctuation fluctuated in the case of the occurrence of the crosstalk according to driving capabilities of cells for driving the parallel lines, so as to calculate how much delay fluctuation the parallel line length extracted in the parallel line length extracting procedure corresponds to; and

outputting the delay fluctuation calculated in the delay fluctuation calculating step as delay information for verifying a timing.

5. A crosstalk checking method comprising the steps of:

extracting a parallel line length between adjacent lines by inputting a layout, and further, inputting a reference value describing a restriction value of the parallel line length;

inputting a library, in which delay information is

described, and further, inputting a standard master cell having a plurality of drive capabilities, calculating a determining value of the drive capability per drive capability of the master cell based on waveform inclination information of an output signal in the library with respect to a target cell block whose drive capability is unknown, and subsequently, calculating a determining value of the drive capability of the target cell block, so as to determine the drive capability of the target cell block by comparison; and

determining the crosstalk based on the restriction value of the parallel line length corresponding to the drive capability determined in the drive capability determining step with respect to the adjacent lines extracted in the parallel line length extracting step in the case where the adjacent lines are driven by the target cell block.

6. A crosstalk checking method comprising the steps of:

extracting a parallel line length between adjacent lines per hierarchy with respect to a hierarchically designed layout by inputting a layout, and further, inputting a reference value describing a restriction value of a parallel line length;

checking a connection relationship between lines across a hierarchy in a net list of each of hierarchies so as to extract boundary information;

calculating the parallel line length across the hierarchy by summing the parallel line lengths extracted per hierarchy with respect to the same net of the adjacent lines across the hierarchy; and

determining a portion at which crosstalk occurs in comparison of the parallel line length across the hierarchy with a predetermined reference value.